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TRANSMITTAL FORM

(To be used for all correspondence after initial filing)

Application No.	09/920,789	Patent No. 6,907,433 B2
Filing Date	1 August 2001	Issue Date: 14 June 2005
First Named Inventor	Yaoping Wang	
Group Art Unit	2172	
Examiner Name	Joon H. Hwang	RECEIVED JUL 18 2005
Attorney Docket No.	OR02-13401	

Total Number of Pages in this Submission:

ENCLOSURES (check all that apply)

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| <input checked="" type="checkbox"/> Fee Transmittal Form
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<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input checked="" type="checkbox"/> Additional Enclosure(s):
<input checked="" type="checkbox"/> Return Receipt Postcard
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<input checked="" type="checkbox"/> Certificate of Correction
<input checked="" type="checkbox"/> Copy of Notice of Recordation of Assignment document
<input checked="" type="checkbox"/> Copy of first page of issued patent number US 6,907,433, B2 |
|--|---|---|

Remarks:

SIGNATURE OF APPLICANT, ATTORNEY OR AGENT

Name	A. Richard Park (Registration No. 41,241)	Date	01 July 2005
Signature		Telephone	530-759-1661
Address	2820 Fifth Street, Davis, CA 95616	Facsimile	530-759-1665

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the U. S. Postal Service as ☐ Express Mail (No. US) or ☒ First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313 on: January 8, 2004

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FEE TRANSMITTAL
for FY 2003

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT (\$)**230.00****Complete if Known**

Application Number	09/920,789	Patent No.	6,907,433 B2
Filing Date	1 August 2001	Issue Date	4 Jun 2005
First Named Inventor	Yaoping Wang		
Examiner Name	Joon H. Hwang		
Group Art Unit	2172		
Attorney Docket No.	OR02-13401		

OFFICE OF PETITIONS**METHOD OF PAYMENT (check one)**

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any overpayment to:

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Park, Vaughan & Fleming LLP

- ☒ Charge any Additional Fee Required Under 37 CFR 1.16 and 1.17
☐ Applicant claims small entity status. See 37 CFR 1.27

2. ☒ **Payment Enclosed:**
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FEE CALCULATION**1. BASIC FILING FEE**

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1001 750	2001 375	Utility filing fee	
1002 330	2002 165	Design filing fee	
1003 520	2003 260	Plant filing fee	
1004 750	2004 375	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	

SUBTOTAL (1)(\$)**0****2. EXTRA CLAIM FEES**

Total Claims	Extra Claims	Fee from below	Fee Paid
33	-33**= 00	X	
Independent Claims	6	-6**= 0	X
Multiple Dependent			

**or number previously paid, if greater; For Reissues, see below

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 84	2201 42	Independent claims in excess of 3
1203 280	2203 140	Multiple dependent claim
1204 84	2204 42	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent

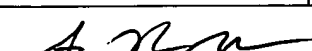
SUBTOTAL (2)(\$)**0****FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet.	
1053 130	1053 130	Non-English specification	
1812 2520	1812 2520	Request for <i>ex parte</i> reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1840*	1805 1840*	Requesting publication of SIR after Examiner action	
1251 110	2255 55	Extension for reply within first month	
1252 410	2252 205	Extension for reply within second month	
1253 930	2253 465	Extension for reply within third month	
1254 1450	2354 725	Extension for reply within fourth month	
1255 1970	2255 985	Extension for reply within fifth month	
1401 320	2401 160	Notice of Appeal	
1402 320	2402 160	Filing a brief in support of an appeal	
1403 280	2403 140	Request for oral hearing	
1451 1510	1451 1510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1300	2453 650	Petition to revive - unintentional	
1501 1300	2501 650	Utility issue fee (or reissue)	
1502 470	2502 235	Design issue fee	
1503 630	2503 315	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	130
1807 50	1807 50	Processing fee for provisional applications	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 750	2809 375	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 750	2810 375	For each additional invention to be examined (37 CFR 1.129(b))	
1801 750	2801 375	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	
Other fee (specify) 1811: Certificate of Correction			100

* Reduced by Basic Filing Fee Paid

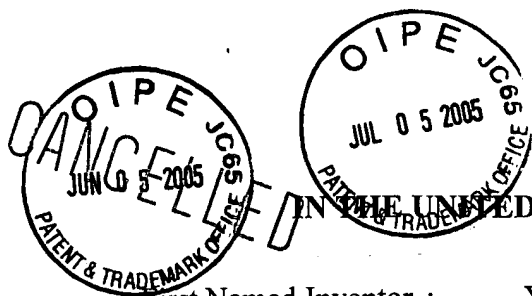
SUBTOTAL (3)(\$)**230****SUBMITTED BY**

Name (Print/Type)	A. Richard Park	Registration No. (Attorney/Agent)	41,241	Telephone	530-759-1661
Signature				Date	01 July 2005

Complete (if applicable)

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor : Yaoping Wang
Application No. : 09/920,789
Filed : 1 August 2001
Patent No. : 6,907,433 B2
Issued : 14 June 2005
Docket : OR02-13401
Title : System and Method for Managing Object to Relational One-to-Many Mapping
Group/Art Unit : 2172
Examiner : Pierre M. Vital

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OFFICE OF PETITIONS

PETITION TO CORRECT ASSIGNEE

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicant hereby petitions for the correction of the Assignee name and residence data as submitted with the issue fee transmittal for U.S. Patent No. 6,907,433 B2. The correct name and residence data are as follows (and match the information recorded at reel/frame 013820/0707 on 10 March 2003):

OIC Acquisition I Corporation
Redwood Shores, CA

07/07/2005 HTECKLU1 00000013 6907433
02 FC:1464 130.00 OP

Enclosed is a Certificate of Correction regarding this correction. Payment is enclosed in the amount of \$230 for this petition and the Certificate of Correction.

07/07/2005 HTECKLU1 00000013 6907433

01 FC:1811

100.00 OP

Respectfully submitted,

Date: 01 July 2005

By:

A. Richard Park
A. Richard Park

41,241

(Registration No.)

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(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO : 6,907,433 B2

DATED : 14 June 2005

INVENTOR(S): Wang, et al.

It is certified that an error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Assignee: **OIC Acquisition I Corporation**
Redwood Shores, CA (US)

MAILING ADDRESS OF SENDER:

A. Richard Park
Park, Vaughan & Fleming LLP
2820 Fifth Street
Davis, CA 95616

PATENT NO: 6,907,433 B2

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102387896A

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RECORDATION DATE: 03/10/2003

REEL/FRAME: 013820/0707

NUMBER OF PAGES: 5

BRIEF: CORRECTIVE ASSIGNMENT TO CORRECT THE ASSIGNEE ADDRESS PREVIOUSLY RECORDED ON REEL 013055 FRAME 0327.

ASSIGNOR:

WANG, YAOPING

DOC DATE: 06/12/2002

ASSIGNOR:

SUTHERLAND, JAMES BRYCE

DOC DATE: 06/12/2002

ASSIGNEE:

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~~REDWOOD SHORES, CALIFORNIA 94065~~

SERIAL NUMBER: 09920789

FILING DATE: 08/01/2001

PATENT NUMBER:

ISSUE DATE:

LAZENA MARTIN, EXAMINER
ASSIGNMENT DIVISION
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JUL 18 2005



US006907433B2

(12) **United States Patent**
Wang et al.

(10) **Patent No.:** US 6,907,433 B2
(45) **Date of Patent:** Jun. 14, 2005

(54) **SYSTEM AND METHOD FOR MANAGING OBJECT TO RELATIONAL ONE-TO-MANY MAPPING**

(75) **Inventors:** Yaoping Wang, Ottawa (CA); James Bryce Sutherland, Ottawa (CA)

(73) **Assignee:** Oracle International Corp., Redwood Shores, CA (US)

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 603 days.

(21) **Appl. No.:** 09/920,789

(22) **Filed:** Aug. 1, 2001

(65) **Prior Publication Data**

US 2003/0028545 A1 Feb. 6, 2003

(51) **Int. Cl.⁷** G06F 17/30

(52) **U.S. Cl.** 707/104.1; 707/103 R;
707/101

(58) **Field of Search** 707/100-104.1,
707/1-10, 200-206

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,499,371 A * 3/1996 Henninger et al. 707/102

5,560,014 A * 9/1996 Imamura 717/108
5,615,362 A 3/1997 Jensen et al. 395/614
5,706,506 A 1/1998 Jensen et al. 395/614
5,799,309 A * 8/1998 Srinivasan 707/102
6,078,926 A 6/2000 Jensen et al. 707/103
6,101,502 A 8/2000 Heubner et al. 707/103
6,385,618 B1 * 5/2002 Ng et al. 707/103 Y

* cited by examiner

Primary Examiner—Jean M. Corrielus

Assistant Examiner—Joon Hwan Hwang

(74) *Attorney, Agent, or Firm*—Park, Vaughan & Fleming LLP

(57) **ABSTRACT**

Instructions are generated to manipulate target objects and relationships in a relational database when a source object having a one-to-many relationship of privately owned type with the target objects is manipulated. To generate instructions, mapping meta-data is used which contains information as to how object classes of the object model map to tables in the database and how relationships map to foreign keys.

12 Claims, 6 Drawing Sheets

